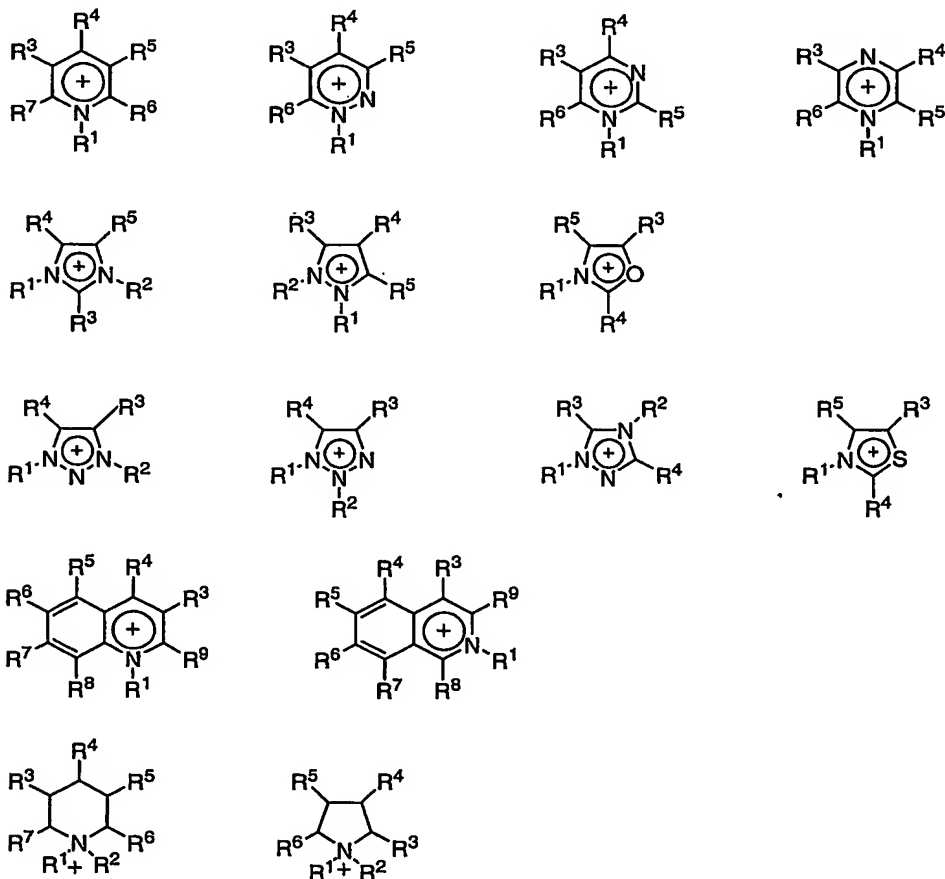


Claims

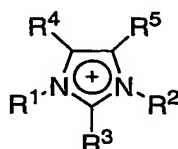
1. A method for preparing an organic starch ester comprising mixing a starch material with an ionic liquid solvent to dissolve the starch, and then treating the dissolved starch with an organic esterifying agent to form an organic starch ester,
- 5 and subsequently separating the organic starch ester from the solution.
2. The method according to claim 1 wherein microwave irradiation is applied to assist in dissolution and esterification.
3. The method according to claim 1 or 2 wherein pressure is applied to assist in dissolution and esterification.
- 10 4. The method according to claim 1 wherein the ionic liquid solvent is molten at a temperature of below 200°C.
5. The method according to claim 1 wherein the cation of the liquid solvent is selected from the group consisting of



wherein R^1 and R^2 are independently a C_1 - C_6 alkyl or C_2 - C_6 alkoxyalkyl group, and R^3 , R^4 , R^5 , R^6 , R^7 , R^8 and R^9 are independently hydrogen, a C_1 - C_6 alkyl, C_2 - C_6 alkoxyalkyl or C_1 - C_6 alkoxy group, and

5 wherein the anion of the ionic liquid solvent is halogen, pseudohalogen or C_1 - C_6 carboxylate.

6. The method according to claim 5 wherein said cation comprises



10 wherein R^3 - R^5 are each hydrogen and R^1 and R^2 are the same or different and represent C_1 - C_6 alkyl, and said anion is halogen, preferably chloride.

7. The method according to claim 1 wherein the starch material is native starch or hydrolyzed starch.

15 8. The method according to claim 1 wherein the organic starch ester is separated from the solution by adding a non-solvent for the organic starch ester to precipitate the organic starch ester.

9. The method according to claim 8 wherein said non-solvent is an alcohol, a ketone, acetonitrile, a polyglycol, an ether or water.

10. The method according to claim 1 wherein the organic starch ester is separated by extraction with a non-solvent for the ionic liquid solvent.

20 11. The method according to claim 1 wherein the organic esterifying agent is a C_1 - C_{11} , preferably a C_1 - C_6 carboxylic acid or a reactive derivative thereof.

12. The method according to claim 11 wherein the C_1 - C_6 carboxylic acid or a reactive derivative thereof is formic acid, acetic acid, propanoic acid, butanoic acid, acetic anhydride, propanoic anhydride or butanoic anhydride.